

Babytherm  
8004/8010

Edition 01.2003

### Explanation of Symbols

⌋ Accessories missing

V = Enter value

Installation site:

Serial no.:

Date of delivery/  
startup:

Invoice no. or  
delivery no.:

Other:

For internal use only. For internal use only.

1. Device in general

- ### 1.1 Software version

- ### 1.2 Options as per name plate

- ### 1.3 Operating hours

- #### 1.4 General condition

- #### 1.4.1 Connecting cable of Babytherm

C

[illegible]

- #### 1.4.2 Connecting cable of the column (US version)

Connecting cable of column is undamaged.

C

[illegible]

- ### 1.4.3 Control unit

- #### 1.4.3.1 Attachment

C

[illegible]

- #### 1.4.3.2 Fuses

The fuses are as specified on the rating plate.

C

[illegible]

- #### 1.4.3.3 Membrane keypad

C

[illegible]

- #### 1.4.3.4 ON/OFF switch

C

[illegible]

- #### 1.4.3.5 Plug-in connector

C

[illegible]

1.4.4	Mains voltage distributor (located underneath base plate)		
	The fuses are as specified on the rating plate.	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.5	Trolley and column		
1.4.5.1	Pedals of height adjustment (optional)	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.5.2	2 x castor 125 mm (2M 20792)	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.5.3	2 x lockable castor 125 mm (2M 20794)	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.5.4	4 x cap (2M 20348) on tube ends of trolley. The cap holds the castors.	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.6	Mattress heater		
1.4.6.1	Sealing of heating plate	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.7	Mattress		
1.4.7.1	Foam mattress, Babytherm 8004 (2M 21012).	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.7.2	Gel mattress, Babytherm 8010 (2M 20827)	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<b>Important:</b> Repair small fissures on surface using adhesive tape or repair set for gel mattress 2M 21324.		
1.4.8	Hook rail with hook 2 M 21293 beneath the top part of the mattress tray (option)	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.9	Grip strip 2M 21468 on top part of mattress tray (option)	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.10	Canopy 2M 21030 (option)	C O	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.10.1	Thermometer 2M11111		
	Comparative measurement in water bath, permissible deviation 0.4 °C, water bath 20 – 35 °C.	O	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.10.2	Holder for canopy (2M 21342)	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.11	Bottom part of mattress tray		
	The bottom part of the mattress tray is secured to the base plate with 4 Allen screws.	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.12	Bottom part of mattress tray		
1.4.12.1	Corners 2M 21390 for mounting of panel.	C	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.4.12.2	Panels, 4 x (15 cm or 23 cm height)		
	The panels engage securely in the corners.	C O	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

1.4.12.3	Hose ducts (2M 20434)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.12.4	Only with 23 cm face panel at the rear:  Lock (2M 13042) Injector (2M 14190) Label with flow table (2M 21147)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.13	Inside panel 2 M 20936 (height approx. 70 mm)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.14	Mattress tray tilt adjustment														
1.4.14.1	Resetting springs (8300445)  Resetting springs for locking lever are fitted.	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.15	X-ray drawer (Babytherm 8004, option)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.16	Core and peripheral skin-temperature sensor connector	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.17	Protective screen (radiant heater)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.18	Suction														
1.4.18.1*	Replace bacterial filter CH 102. (set of 5 6723976)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.19	Grip strip accessory rail (2M 20860)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.20	Swivel cupboard with attachment (option)	C O	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.21	Stand.  Retighten screws of stand.	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.22	Tray for monitor	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.23	Rail for tray	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.24	Compact rail 2M 85337 (option)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.25	Carrying frame (M 25858)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.25.1	Jar holder	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.26	Connecting hose	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.27	Secretion suction hose (M 25780)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.28	Secretion sightglass or finger tip (M 07582)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.29	Container, 2 x (M 20091)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.30	Cylinder cap 2M 85012 with valve	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.31	Float (M 26007)	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.32	Pressure-limiting valve with mica washer R 17329 (option)	C O L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1.4.33	Ejector												
1.4.34	Power with pediatric bronchial suction device 2M 85045 up to 0.5 bar; power with rail clamp up to 0.5 bar.	C O	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.35	Power with bronchial suction device 2M 21187, fixed. Power up to 0.5 bar	C O	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.36	Pipeline system connecting tube (follow national regulations!)	C L	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.37	O <sub>2</sub> distributor for central supply	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.38	O <sub>2</sub> distributor for O <sub>2</sub> compressed-gas cylinder	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.39	O <sub>2</sub> compressed-gas cylinder (B 02352)	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.40	O <sub>2</sub> compressed-gas cylinder (B 02533)	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.41	AIR distributor for central supply	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.42	Infusion holder (2M 21514)	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.43	Holder for ventilation hoses (2M 21191)	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.44	Ventilator hose holder (84 10080)	C	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.4.45	Ventilator												
	Carry out check according to respective Test Certificate.												
1.4.46	Additional monitoring devices												
	Carry out checks according to respective Test Certificate.												

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## 2. Replacement articles to be used

- 2.1 Halogen lamp
- Replace halogen lamp after 1000 operating hours.
- Important:** After replacing the halogen lamp, use Customer Service Mode (CSM) to reset operating hours to zero.
- 2.2 Suction
- 2.2.1 Bacterial filter CH102
- Replace bacterial filter CH102 (set of 5 6723976).

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3. Electrical safety

3.1 Protective earth conductor resistance test(s)

3.1.1 Trolley, height adjustment, column and attachment of control unit

The protective earth conductor resistance of the trolley, height adjustment, column and attachment of the control unit should be less than 0.2 ohms.

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3.1.2 Mattress heater (Babytherm 8010)

The protective earth conductor resistance to the aluminum plate of the mattress heater should be infinite ohms.

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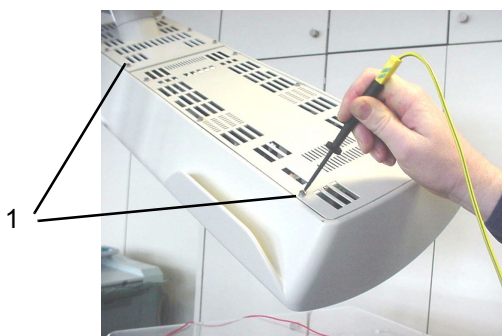
3.1.3 Radiant heater

Use the test probe to measure the following protective earth conductor resistances:

3.1.3.1 Screws

Measure at screws (1).

(Note: The screws are located on the top side of the radiant heater.)



The protective earth conductor resistance should be  $\leq 0.2$  ohms.

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3.1.3.2 Screw of protective screen

Measure at screw (2).

(Note: The radiant heater should be in its normal position.)



The protective earth conductor resistance should be  $\leq 0.2$  ohms.

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3.1.3.3 Screw of protective screen

Measure at screw (3).

(Note: The radiant heater should be in its swivel end position.)



The protective earth conductor resistance should be  $\leq 0.2$  ohms.

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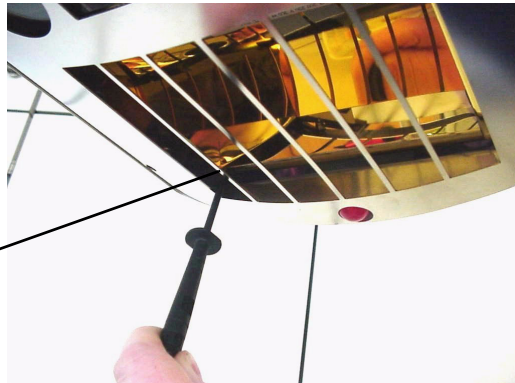
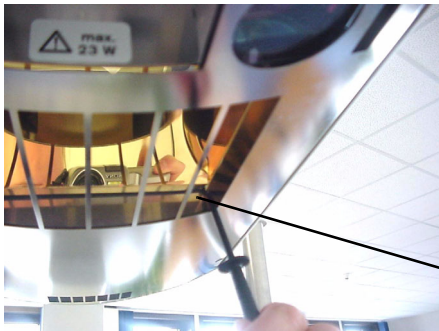
### 3.1.3.4 Edge of reflector plates of radiant heaters

Measure at edges of reflector plates (4).

(Note: The radiant heater should be in its normal position.)



**To avoid damage to reflector plates, measure only at edges of reflector plates.**



The protective earth conductor resistance should be  $\leq 0.2$  ohms.

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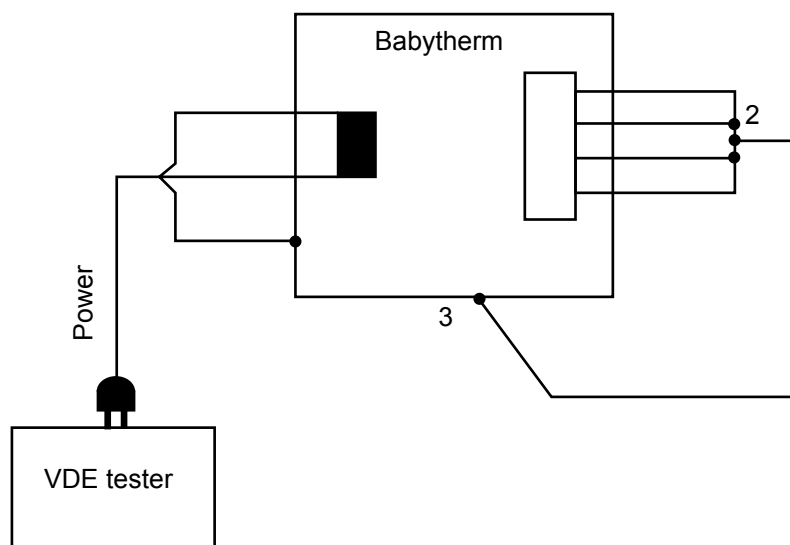
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### 3.2 Equivalent device leakage current

Switch the Babytherm on.

Short-circuit the skin-temperature sensor connectors and connect to the ground stud (ground).

Operate the height adjustment and measure the equivalent leakage current.



2 Sensor connectors  
3 ground (ground stud) on unit.





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#### 4. Functional tests

##### 4.1 Height-adjustable trolley (option)

Connect to mains power supply and press all 4 pedals.

The mattress tray should go up or down. O

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##### 4.2 Mattress tray

Pull the locking lever and let go again: The spring tension should be sufficient to return the lever to its original position. C O

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Pull the locking lever halfway out (approx. 20 mm).

The mattress tray should remain locked. C O

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Pull the locking lever 3/4 out (approx. 30 mm).

It should be possible to adjust the mattress tray without noise. C O

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Check the locking mechanism in 10 different positions.

The mattress tray should engage securely and without play. C O

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##### 4.2.1 \* Additional tests at 4-year intervals,

Remove the complete mattress tray (top and bottom parts) (4 screws). Visual check gearing in bottom part and notch 2M 20855. C O

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**Important:** Both fixing screws of the notch must be secured with UHU-Plus glue upon refitting. Grease movable metal parts with Molykote 55M (1554093). **Do not grease the Teflon sliders!**

Refit the mattress tray.

##### 4.3 Radiant heater

Checking the swivel function. O

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#### 4.4 Control unit

##### 4.4.1 Power-on self-test

Switch the Babytherm on.

The self-test should start. All LEDs, 7-segment displays and audible alarm should be activated for approx. 2 seconds. ○

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##### 4.4.2 Lights and displays test

Press the "Check" key.

The following message appears on the plain text display: "All displays on, horn on". All displays on the control unit and the red central alarm LED on the radiant heater are activated for approx. 2 seconds. ○

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##### 4.4.3 Checking the nurse call

Call up the configuration mode (CSM).

Activate test "c06".

"Nuc" appears on the large 7-segment display.

A "0" appears on the small 7-segment display.

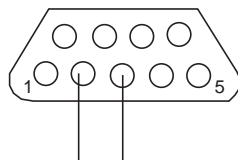
Press the silence button.

A "1" appears on the small 7-segment display. ○

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##### 4.4.4 Checking the Babylink interface

Short-circuit pin 2 and pin 3 of the Babylink interface on the rear panel of the device.



The flat LED, visible through the bottom vent slots of the control unit, flashes. ○

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#### 4.5 Radiant heater

- \* Perform measurement checks (MTK) every 2 years.

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#### 4.5.1 Manually adjustable heating capacity

Switch the Babytherm to "man" using the Skin/man key.

The yellow LED "man" on the Skin/man key should flash.

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The following message should be displayed: "Adjust heating level of heater. Press OK key to confirm".

Press the OK key.

Using the arrow-up and arrow down keys, select the 10 heating levels one after the other.

The green LEDs should come on at heating levels 1 to 3.

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The yellow LEDs should come on at heating levels 4 to 10.

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#### 4.5.2 Two-side warming

Dermatological check whether both infrared heaters are warming.

#### 4.5.3 Skin-temperature control

Both skin-temperature sensors are plugged (yellow and white)

A value between 15 °C and 42 °C should appear on the actual value display of the skin-temperature measurement and the peripheral skin-temperature measurement (foot symbol).

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If the value is below or above the measuring range, three dashes will appear on the 7-segment display.

Press the Skin/man key.

The yellow LED on the Skin/man key should flash.

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The following message appears on LC display: "Skin-temperature sensor attached properly? Press OK key to confirm".

Press the OK key.

The following message appears on LC display: "Adjust skin temperature. Press OK to confirm."

Press the OK key.

The following messages appears on the LC display: "Skin-temperature deviation above (0.3 to 1.0) °C. Confirm alarm with OK key".

**Note:** The skin-temperature deviation can be adjusted in a range between 0.3 °C – 1.0 °C in the Customer Service Mode (CSM).

Press the OK key.

It should be possible to adjust the target value in increments of 0.1 °C using the arrow-up and arrow-down keys.

Checking the adjustment range of 35.0 °C to 37.5 °C.

Adjust the target value to 35.1 °C.

Press the OK key.

**Note:** If you do not confirm the target value within the next 10 seconds, the message will disappear and the old value will remain set.

Plug the 36 °C test connector (7911314) into the yellow and white socket of the skin temperature sensors.

The displayed actual core temperature may deviate by a maximum of +/- 0.2 °C from the simulated value (36 °C).

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Wiggle the connected yellow 36 °C test connector horizontally and vertically.

The displayed actual core temperature may deviate by a maximum of +/- 0.2 °C from the simulated value (36 °C).

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The displayed actual peripheral temperature may deviate by a maximum of +/- 0.2 °C from the simulated value (36 °C).

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Wiggle the connected white 36 °C test connector horizontally and vertically.

The displayed actual peripheral temperature may deviate by a maximum of +/- 0.2 °C from the simulated value (36 °C) as you wiggle the connector.

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Disconnect the 36 °C test connector (7911314) from the yellow and white socket of the skin temperature sensors.

4.5.4 Power failure alarm

(Babytherm is switched on)

Disconnect the Babytherm from the mains power supply.

The Babytherm should generate a visual and audible alarm.

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Reconnect to mains power supply.

The target value of the skin temperature should be 35.1 °C.

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4.5.5 Worklight/nightlight

Press the "worklight" key.

Both energy-saving lamps should come on.

Press the "worklight" key again to turn off the worklight.

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Press the "nightlight" key.

One energy-saving lamp should come on.

Press the "nightlight" key again to turn off the nightlight.

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4.5.6 Phototherapy (option)

Switch on the phototherapy.

The following message appears on the LC display: "Phototherapy: Put on eye protection. Start with OK".

Press the OK key.

All 6 halogen lamps should come on.

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**Note:**

If one halogen lamp is defective, replace the whole set of 6 halogen lamps and reset the "phototherapy" operating hours meter, refer to Instructions for Use/Operating Instructions.

As soon as 1000 operating hours are reached, replace the whole set of 6 halogen lamps and reset the "phototherapy" operating hours meter, refer to Instructions for Use/Operating Instructions.

Press the OK key.

All 6 halogen lamps should go off.

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#### 4.6 Mattress heater (Babytherm 8010)

**Important:** The radiant heater must be off.

##### 4.6.1 Keypad

It should be possible to adjust the target value in increments of 0.1 °C in the normal range of 36 °C to 38 °C using the arrow-up and arrow-down keys.

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**Note:** If you do not confirm the target value within the next 10 seconds, the message will disappear and the old value will remain set.

If the target value has been changed, the following message will appear: "Adjust mattress temperature. Confirm with OK".

It should be possible to increase the target value from 38 °C to 38.5 °C.

Use the arrow-up key to adjust the target value to 38 °C.

The following message appears on the display: "Confirm mattress temperature above 38 °C with OK."

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Press the OK key.

Adjust the target value to 38.5 °C.

Press the OK key.

Yellow > 38 °C indicator flashes.

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It should be possible to extend the target value down from 36 °C to 30 °C.

Use the arrow-down key to adjust the target value to 36 °C.

The following message appears on the display: "Confirm mattress temperature below 36 °C with OK."

Press the OK key.

Adjust the target value to 30 °C.

Press the OK key.

Yellow "<36 °C" indicator flashes.

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**Note:** Display range of actual value: 5 °C to 45 °C. If the value is below or above display range, three dashes will be displayed at the bottom or at the top.

4.6.2  $\pm 1\text{ }^{\circ}\text{C}$  alarm with target/actual value deviation

Allow the Babytherm to warm up to at least  $31.1\text{ }^{\circ}\text{C}$ .

Adjust target value  $1.1\text{ }^{\circ}\text{C}$  higher and lower, respectively, than the actual value.

Press the OK key.

A visual and audible  $\pm 1\text{ }^{\circ}\text{C}$  alarm should be generated..

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Press the OK key to acknowledge the alarm.

**Note:** The audible  $\pm 1\text{ }^{\circ}\text{C}$  alarm is silenced for 1 hour after switching on the mattress heater.

The yellow LEDs (caution) should come on.

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4.7 Secretion suction device

Connect up complete suction device.

Create vacuum and turn the bottle over.

The float should be sucked in.

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Turn the bottle over and interrupt vacuum.

The float should drop back.

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5. Place the fully functional Babytherm to the user's/owner's disposal.

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6. Confirmation of test

Name:

Date:

Signature:


\* These steps are regarded as repair work and are therefore not included in the inspection service price.

This image shows a full page of blank white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing or drawing. There are no margins, text, or other markings on the page.



## 8. Annex

### 8.1 Test equipment list:

Thermometer	2M11111
Test connector 36 °C	79 11 314

### 8.2 DrägerService Mode

#### 8.2.1 Accessing the DrägerService Mode

The DrägerService Mode comprises the tests c01 to c08, the error memory (Err) and the tests d01 to d22.

- Switch the Babytherm on and wait until the intermittent test sound stops.
- Press the OK key **1** and press and hold the silence key **2** for 5 seconds.

The error memory should appear on the text display. The 7-segment display **A** should indicate "F – –" (no errors). The 7-segment display **B** should indicate the error rate of the error.

Errors can be read out using the arrow keys **3**. Pressing and holding the silence key **2** for 3 seconds will delete all errors.

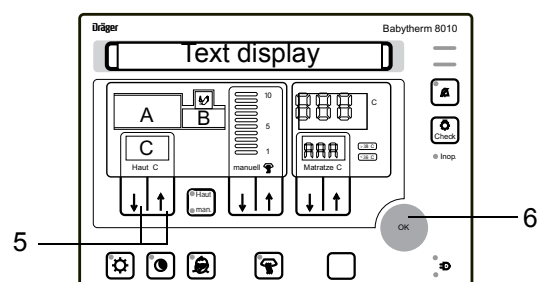
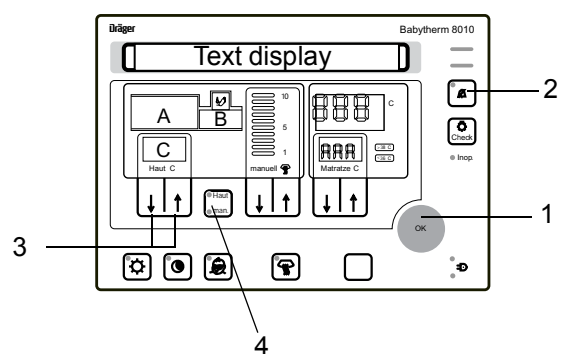
- Press the Skin/man key **4**.

The configuration mode should appear on the text display.

- Press the Skin/man key **4** again.

The DrägerService Mode is now active.

- Select the desired mode (d01 to d22) using the arrow keys **5**.



#### 8.2.2 Exiting the DrägerService Mode

- Press and hold the OK **6** key for 3 seconds.

The Babytherm should return to normal operating mode.